

ABSTRACT:

THE RARE AND ENDANGERED SPECIES IN MAINE

LESLIE M. EASTMAN

The Report on Endangered and Threatened Plant Species of the United States prepared by the Smithsonian Institution in 1975 recommended ten taxa of vascular plants which occur in Maine for federal listing as endangered or threatened. The revised list (1978) recommended listing of an additional seven taxa. Of the 17 taxa, five are endemic or nearly endemic to the state of Maine. Three others are restricted to the Northeast, and the remainder are considered extremely rare throughout the eastern portion of the United States. One species, *Trollius laxus* Salisb., although listed for Maine, does not occur in the state.

The endemic species appear to be the most puzzling in view of the fact that the entire state of Maine experienced extensive glaciation during the Pleistocene. Important questions about this group pertain to the accuracy of identification, the manner in which the taxa survived glaciation, the possibility of a taxon having evolved since the last glacial advance, and the taxonomic validity of the taxa in question.

Pedicularis furbishiae S. Wat., *Carex elachycarpa* Fern., and *C. josselynii* (Fern.) Mackenz. are three endemics which occur in the St. John and Aroostook River Valleys of northern Maine. There appears to be no question concerning the taxonomic status of *Pedicularis furbishiae*. However, doubts have arisen as to whether or not *Carex elachycarpa* and *C. josselynii* are good species. Some botanists contend that both may be hybrids.

Carex oronensis Fern. is restricted to the Penobscot River Valley of central Maine. Its taxonomic status is also in question. The plant grows in open meadows and clearings in association with other species of section *Ovales* of the genus *Carex* and could well be a hybrid. The sedge was last collected in 1916 by M. L. Fernald and B. Long. Douglas Burdick of Bangor and I relocated the population on July 7, 1978.

The last endemic in question is *Mimulus ringens* var *colpophilus* Fern., which occurs in estuaries from Washington County to Sagadahoc County. This variety differs from the typical variety in that the internodes and principal leaves are smaller. These characters may represent phenological expression in response to submergence by tidal waters twice daily, and thus the plant may represent an ecological form unworthy of taxonomic recognition.

MAINE AUDUBON SOCIETY
FALMOUTH, MAINE